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ZHU, RICHARD Z				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/725,408

Applicant(s)

HIKAWA ET AL.

Examiner

RICHARD Z. ZHU

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Acknowledgement

1. Acknowledgement is made of applicant's amendment made on 2/25/2008. Applicant's submission filed has been entered and made of record.

Response to Applicant's Arguments

2. Applicant's arguments with respect to Claims 1, 6, and 11 persuasive. Previous grounds of Rejection are withdrawn and upon further consideration, new grounds of rejections are entered in view of the amendment to the claims.
3. The applicant argued that a job ticket could be combined with print data without executing any service processing operation contained within the job ticket, the examiner disagrees for two reasons.
 - Reason 1: in the case of *Hower*, a user instruct an end device to implement a print job in accordance to the specification set forth by the user. This is done by the processor via generation of a job ticket where the job ticket set forth the instructions in a format that is understandable by the end device. Without these instructions, the end device would be unable to implement the will of the user. As such, the processor of *Hower* enforces or executes the will of the user by generating a job ticket instructing the end device to implement a print job as willed by the user as the chief executive of the Executive branch (i.e., the president of United States) would enforce or execute the will of the Legislative branch (the congress) by instructing its various cabinet (Secretaries of various departments under the control of the chief executive) to

implement legislations set forth by the congress. Likewise, without the president issuing executive orders, legislations passed by the congress would not be implemented.

- The meaning of words executing and carrying out is very ambiguous and broad so much so that it can be interpreted in a plurality of ways. The actions performed by the processor in Hower and Barry, although differs in the manner in which the actions of end devices are effected, can be reasonably interpret as either executing or carrying out the will of a user as long as the will of the user is implemented by the end device under the control of a processor.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 4-7, 9-12, 14-17, 19-22, 24-27, and 29-30 are rejected under 35 USC 103 (a) as being unpatentable over *Hower, Jr. et al. (US 5467434 A)* in view of *Kageyama (US 5625757 A)* and *Barry et al. (US 5859711 A)*.

Regarding means of Claim 6 therefore device of Claim 1 and method of Claim 11, *Hower* discloses a service processing system (Fig 1, network processing system 10 comprising a plurality of sub-components) comprising:

interpreting means (Fig 2, **Combination Examiner 37**) for interpreting contents of script data that describes at least a location of document data as a processing object (Col 4, **Rows 7-27, print job ticket script in ASCII format contains the location of electronic document 39 that is to be printed on the print media**), and contents of plural service processing operations to be performed to the document data (Col 4, **Rows 5-12 and Rows 20-27, “quantity, plex, enlargement, reduction, stock, finishing, etc”**); and

linkage processing means (Fig 2, **Server 25 and see Col 3, Rows 50-59**) for linking plural service processing units (Fig 2, **Printers 12-N**) that are connected to a network with each other to perform the plural service processing operations to the document data on the basis of an interpretation result of the interpreting means (Col 4, **Row 49 – Col 5, Row 58, in particular, Col 4, Rows 49-64 and Col 5, Rows 48-58**).

Howe does not disclose a service processing device that includes the above sub-system.

Kageyama discloses a service processing device that comprises an interpreting means (Fig 4, **Printer Server 300, in particular, Printer/Spooler Control Server 15, Col 19 - Col 24 and more. In particular, Col 23, Rows 30-43**) and linkage processing means (Col 17, **Rows 37-51, Printer Server 300 connects to all the printers over the network**).

It would've been obvious to one of ordinary skill in the art at the time of the invention to incorporate the different subsystems of *Howe* into the integrated server device of *Kageyama* in order to produce a compact and stream line efficient system that manages a plurality of print jobs and controls distribution of said print jobs to the appropriate printer

with minimal cost by having the equivalence of *Hower's* interpreting means at a central server instead of being at individual clients.

The combined teachings does not disclose wherein at least two of the service processing units each perform a different subset of the service processing operations.

Barry in the same field of endeavor discloses a service processing device (**Fig 1, Processor/Distributor 14**) comprising:

a controller that:

(1) interprets contents of script data that describes at least a location of document data as a processing object (**Col 4, Rows 42-55, first determine what the beginning and the end of a print job is and determine what printer to send the distinct and separate page to**), and contents of plural service processing operations to be performed to the document data (**Col 10, Rows 1-20, distributing different parts of the single print job to different print engine that best complete the print conditions specified**); and

(2) links plural service processing units that are connected to a network with each other to perform the plural service processing operations to the document data on the basis of a result of the interpreting (**Fig 1, Processor 14 links a plurality of print engines 16 to perform a plurality of operations, see Col 10, Rows 1-20**);

wherein at least two of the service processing units each perform a different subset of the service processing operations (**Col 10, Rows 1-20, a dedicated black and white engine for distributed print jobs requiring monochrome printing only and a dedicated color**

engine for distributed print jobs requiring color printing. The plurality of distributed print jobs being subsets of the single print job integrated by print spooler 20, Col 4, Rows 42-64).

Given the fact that each printer of *Hower* comprise an unique marking engine with a specific characteristics different from another printer on the network, it would've been obvious to adopt the processor of *Barry* into the server of the combined teachings in order to provide routing of the different images and pages to various printers so as to provide the ability for the system to make certain decisions about how a particular job is output (Col 10, Rows 1-4).

Regarding means of Claim 7 therefore device of Claim 2 and method of Claim 12, *Hower* discloses the service processing system further comprising:

setting means (Fig 2, UI 16 and associating keyboard) for setting the location of the document data and the contents of the plural service processing operations to be performed to the document data (Col 4, Rows 13-27, **the user defines the plurality of operations to be performed on electronic document 39 that is ultimately send to the printers for printing**); and

creating means (Fig 2, Server Processor 50) for creating, on the basis of setting contents set by the setting means, the script data for performing the plural service processing operations to the document data (Col 4, Row 65 - Col 5, Row 21, **creating print file in PDL script format, Col 5, Rows 4-5).**

Regarding means of Claim 9 therefore device of Claim 4 and method of Claim 14, *Hower* discloses wherein the plural service processing operations at least include two or more of: a copy operation, a print operation, a scan operation, a facsimile transmission operation, a facsimile reception operation, an electronic mail delivery operation, a storing operation, a readout operation, an optical character recognition operation, and a noise removal operation (**Col 3, Rows 40-48, printers for performing print operation whereas printers must have memory means for storing the print data upon reception as well as readout operation so that print data may be read and printing may be executed**).

Regarding means of Claim 10 therefore device of Claim 5 and method of Claim 15, *Hower* discloses wherein the script data at least includes one or more of: information expressing a relation among the plural service processing operations (**Col 4, Rows 28-40, printer profiles**), interface information for invoking the plural service processing operations, and information for configuring a graphical user interface relating to the plural service processing operations (**Col 4, Rows 13-27**).

Regarding means of Claim 21 therefore device of Claim 16 and method of Claim 26, *Hower* discloses a service processing system comprising:

interpreting means (**Fig 2, Combination Examiner 37**) for interpreting contents of script data that describes at least a location of document data as a processing object (**Col 4, Rows 7-27, print job ticket script in ASCII format contains the location of electronic document 39 that is to be printed on the print media**) and contents of plural service

processing operations to be performed to the document data (**Col 4, Rows 5-12 and Rows 20-27, “quantity, plex, enlargement, reduction, stock, finishing, etc”**);

executing means (**Fig 2, Server Processor 50**) for executing at least one of the service processing operations to the document data on the basis of an interpretation result of the interpreting means (**Col 4, Row 65 - Col 5, Row 21, creating print file in PDL script format, Col 5, Rows 4-5**); and

transmission means (**Fig 2, Server 25 and see Col 3, Rows 50-59**) for transmitting the script to another service processing device for performing a next service processing operation after the executing means executes the at least one service processing operation (**Col 4, Row 49 – Col 5, Row 58, in particular, Col 4, Rows 49-64 and Col 5, Rows 48-58**).

Howe does not disclose a service processing device that includes the above subsystem as well as a controller that controls the subsystems in a service processing device.

Kageyama discloses a service processing device that comprises an interpreting means (**Fig 4, Printer Server 300, in particular, Printer/Spooler Control Server 15, Col 19 - Col 24 and more. In particular, Col 23, Rows 30-43**) and linkage processing means (**Col 17, Rows 37-51, Printer Server 300 connects to all the printers over the network**) and a controller (**Fig 4, Printer/Spooler control processing unit 7400 and see Col 17, Rows 57-60**) as well as transmitting the script to another service processing device for performing a next service processing operation after the executing means executes the at least one service

processing operation (**Col 43, Rows 13-23, a new alternative printer is automatically select when the previous printer meets an error**).

It would've been obvious to one of ordinary skill in the art at the time of the invention to incorporate the different subsystems of *Hower* into the integrated server device of *Kageyama* in order to produce a compact and stream line efficient system that manages a plurality of print jobs and controls distribution of said print jobs to the appropriate printer with minimal cost by having the equivalence of *Hower's* interpreting means at a central server instead of being at individual clients.

The combined teachings does not disclose wherein at least two of the service processing units each perform a different subset of the service processing operations.

Barry in the same field of endeavor discloses a service processing device (**Fig 1, Processor/Distributor 14**) comprising:

a controller that:

(1) interprets contents of script data that describes at least a location of document data as a processing object (**Col 4, Rows 42-55, first determine what the beginning and the end of a print job is and determine what printer to send the distinct and separate page to**), and contents of plural service processing operations to be performed to the document data (**Col 10, Rows 1-20, distributing different parts of the single print job to different print engine that best complete the print conditions specified**); and

(2) carries out at least one of the plural service processing operations to the document data on the basis of a result of the interpreting (**Fig 1, Processor 14 links a plurality of print engines 16 to perform a plurality of operations, see Col 10, Rows 1-20**);

(3) causes the service processing device to transmit the script to another service processing device for performing a next service processing operation after executing the at least one service processing operation (**Col 10, Rows 1-20, routing different pages of a single print job into a plurality of print engines on the basis of print related information. Col 10, Rows 62-64, all copies of each individual page must be printed before the next page in the document is printed. Col 13, Rows 46-58, one printer may print at a much higher speed, thereby allowing processing device to perform printing of a next page at a slower printer after executing the at least one service processing operation at the high speed printer**);

wherein at least two of the service processing units each perform a different subset of the service processing operations (**Col 10, Rows 1-20, a dedicated black and white engine for distributed print jobs requiring monochrome printing only and a dedicated color engine for distributed print jobs requiring color printing. The plurality of distributed print jobs being subsets of the single print job integrated by print spooler 20, Col 4, Rows 42-64**).

Given the fact that each printer of *Howar* comprise an unique marking engine with a specific characteristics different from another printer on the network, it would've been

obvious to adopt the processor of *Barry* into the server of the combined teachings in order to provide routing of the different images and pages to various printers so as to provide the ability for the system to make certain decisions about how a particular job is output (Col 10, Rows 1-4).

Regarding means of Claim 22 therefore device of Claim 17 and method of Claim 27, *Hower* discloses:

setting means (Fig 2, UI 16 and associating keyboard) for setting the location of the document data and the contents of the plural service processing operations to be performed to the document data (Col 4, Rows 13-27, the user defines the plurality of operations to be performed on electronic document 39 that is ultimately send to the printers for printing); and

creating means (Fig 2, Server Processor 50) for creating, on the basis of setting contents set by the setting means, the script data for performing the plural service processing operations to the document data (Col 4, Row 65 - Col 5, Row 21, creating print file in PDL script format, Col 5, Rows 4-5).

Regarding means of Claim 24 therefore device of Claim 19 and method of Claim 29, *Hower* discloses wherein the plural service processing operations at least include two or more of: a copy operation, a print operation, a scan operation, a facsimile transmission operation, a facsimile reception operation, an electronic mail delivery operation, a storing operation, a readout operation, an optical character recognition operation, and a noise removal operation (Col 3, Rows 40-48, printers for performing print operation whereas

printers must have memory means for storing the print data upon reception as well as readout operation so that print data may be read and printing may be executed).

Regarding means of Claim 25 therefore device of Claim 20 and method of Claim 30, *Hower* discloses wherein the script data at least includes one or more of: information expressing a relation among the plural service processing operations (Col 4, Rows 28-40, printer profiles), interface information for invoking the plural service processing operations, and information for configuring a graphical user interface relating to the plural service processing operations (Col 4, Rows 13-27).

1. Claims 3, 8, 13, 18, 23 and 28 are rejected under 35 USC 103 (a) as being unpatentable over the combined teachings of *Hower, Jr. et al. (US 5467434 A)*, *Barry et al. (US 5859711 A)* and *Kageyama (US 5625757 A)* in view of *Smith et al. (US 6785015 B1)*.

***Hower* of the combined teachings discloses storage means for storing script data (Fig 2, Server Processor 50 having build-in memory to store the script for writing the necessary print file as disclosed in Col 5, Rows 1-12. See Col 4, Rows 13-27) and selecting means for selecting the script data stored in the storage means (Fig 2, Server Processor 50. Basically, server processor 50 has to convert print data in either PDL or PostScript and job ticket in ASCII format into script fit for print file).**

The combined teachings remained silent on storing plural different items of script data and selecting at least one piece of the plural items of script data stored in the storage means.

Smith discloses a plural different items of script data (Col 4, Rows 37-48, using **HTML, XML, or JAVA as script for communication over the network**) and for selecting at least one piece of the plural items of script data stored in the storage means (Col 4, Rows 37-48, **any one of them can be implemented as the script for communication over the network**).

It would've been obvious to one of ordinary skill in the art at the time of the invention to implement a variety of scripts for the necessity of communicating data over the network from a client to a terminal data processing apparatus.

Conclusion

2. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Richard Z. Zhu whose telephone number is 571-270-1587 or examiner's supervisor King Y. Poon whose telephone number is 571-272-7440. Examiner Richard Zhu can normally be reached on Monday through Thursday, 6:30 - 5:00.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RZ²
04/02/2008

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